

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended): A method of terminating a bus, comprising steps of:
connecting a chip type terminal resistor to one end of a bus formed on an insulative substrate for transmitting a digital signal;
providing in the vicinity of said terminal resistor an insulator having a larger dielectric loss angle at least in the frequency region of said digital signal than said insulative substrate, wherein
said insulator is adapted to absorb and dissipate high frequency electromagnetic energy of high harmonic frequency components of said digital signal and of apparent high frequency components associated with transition time, said high frequency electromagnetic energy entering said bus and reaching said one end,
wherein said insulator includes a thermosetting organic material containing a hydroxyl radical.

2. (Original): The method of terminating a bus according to claim 1, wherein said insulator includes a glass material which contains a modified ionized additive.

Amendment under 37 C.F.R. § 1.111
Application No. 10/079,464
Attorney Docket No. 011703

3-8. (Cancelled)

9. (Currently amended): ~~[[The]]~~ A wiring substrate according to claim 6 or 7, comprising:
an insulative substrate;
a multiplicity of paired transmission lines formed on said insulative substrate;
terminal chip resistors connected between the terminal ends of the respective paired
transmission lines;
insulators each formed to cover one terminal resistor, said insulator having a larger
dielectric loss angle than said insulative substrate at least in the frequency range of digital signals
to be transmitted,
wherein each of said insulators is a thermosetting organic material containing a hydroxyl radical.

10. (Currently Amended): ~~[[The]]~~ A wiring substrate according to claim 6 or 7,
comprising:
an insulative substrate;
a multiplicity of paired transmission lines formed on said insulative substrate;
terminal chip resistors connected between the terminal ends of the respective paired
transmission lines;

insulators each formed to cover one terminal resistor, said insulator having a larger dielectric loss angle than said insulative substrate at least in the frequency range of digital signals to be transmitted,

wherein each of said insulators is a mixture of glass powder containing a modified ionized additive and a thermosetting organic material containing a hydroxyl radical.

11. (Currently Amended): ~~[[The]]~~ A wiring substrate ~~according to claim 6 or 7,~~
comprising:

an insulative substrate;
a multiplicity of paired transmission lines formed on said insulative substrate;
terminal chip resistors connected between the terminal ends of the respective paired transmission lines;

insulators each formed to cover one terminal resistor, said insulator having a larger dielectric loss angle than said insulative substrate at least in the frequency range of digital signals to be transmitted,

wherein each of said terminal resistors comprises:
a glass substrate containing a modified ionized additive and having a dielectric loss angle which is greater than that of said wiring substrate;
a resistive film formed on one surface of said glass substrate; and
a pair of electrodes formed on the opposite ends of said resistive film.

12-15. (Cancelled):

16. (Currently Amended): ~~[[The]]~~ ~~A wiring substrate according to claim 13 or 14,~~
comprising:
an insulative substrate including predetermined regions which have a larger dielectric loss
angle at least in the frequency region of pulse signals transmitted than the rest regions of said
insulative substrate;
paired transmission lines having terminal ends in said respective predetermined regions
of said insulative substrate;
terminal chip resistors each connected between the terminal ends of respective paired
transmission lines,
wherein each of said regions of said insulative substrate having said large dielectric loss
angle is formed of a thermosetting organic material containing a hydroxyl radical.

17. (Currently Amended): ~~[[The]]~~ ~~A wiring substrate according to claim 13 or 14,~~
comprising:
an insulative substrate including predetermined regions which have a larger dielectric loss
angle at least in the frequency region of pulse signals transmitted than the rest regions of said
insulative substrate;

Amendment under 37 C.F.R. § 1.111
Application No. 10/079,464
Attorney Docket No. 011703

paired transmission lines having terminal ends in said respective predetermined regions of said insulative substrate;

terminal chip resistors each connected between the terminal ends of respective paired transmission lines,

wherein each of said regions of said insulative substrate having said large dielectric loss angle is formed of a mixture of glass powder containing at least a modified ionized additive and an organic thermosetting material containing a hydroxyl radical.

18. (Currently Amended): ~~[[The]]~~ A wiring substrate ~~according to claim 13 or 14,~~
comprising:

an insulative substrate including predetermined regions which have a larger dielectric loss angle at least in the frequency region of pulse signals transmitted than the rest regions of said insulative substrate;

paired transmission lines having terminal ends in said respective predetermined regions of said insulative substrate;

terminal chip resistors each connected between the terminal ends of respective paired transmission lines,

wherein each of said terminal resistors comprises:
a glass substrate containing a modified ionized additive and having a dielectric loss angle which is greater than that of said wiring substrate;

a resistive film formed on one surface of said glass substrate; and
a pair of electrodes formed on the opposite ends of said resistive film.

19-22. (Cancelled)

23. (Original): A wiring substrate, comprising:
an insulative substrate;
a multiplicity of paired transmission lines formed on said insulative substrate;
terminal chip resistors each connected between the terminal ends of the respective paired
transmission lines; and
insulators formed to cover the respective terminal resistors and the terminal sections of
said paired transmission lines connected with said terminal resistors, said insulators being made
of a mixture of a magnetic material and an organic resin.

24. (Cancelled)

25. (Original): A wiring substrate, comprising:
an insulative substrate having insulative members which are formed at predetermined
regions thereof and made of a mixture of a magnetic material and an organic resin;

paired transmission lines having their terminal ends positioned in said predetermined sections of said insulative substrate; and

terminal chip resistors each connected between the terminal ends of the respective paired transmission lines.

26-27. (Cancelled):

28. (Previously Presented): The wiring substrate according to claim 23, wherein said magnetic material is a material that exhibits ferri-magnetic resonance.

29. (Previously Presented): The wiring substrate according to claim 25, wherein said magnetic material is a material that exhibits ferri-magnetic resonance.

30. (New): A wiring substrate, comprising:
an insulative substrate;
a multiplicity of paired transmission lines formed on said insulative substrate;
terminal chip resistors connected between the terminal ends of the respective paired transmission lines;
insulators each formed to cover a respective terminal resistor and terminal ends of respective paired transmission lines, said insulator having a larger dielectric loss angle than said

insulative substrate at least in the frequency range of digital signals transmitted by said transmission lines,

wherein each of said insulators is a thermosetting organic material containing a hydroxyl radical.

31. (New): A wiring substrate, comprising:

an insulative substrate;

a multiplicity of paired transmission lines formed on said insulative substrate;

terminal chip resistors connected between the terminal ends of the respective paired transmission lines;

insulators each formed to cover a respective terminal resistor and terminal ends of respective paired transmission lines, said insulator having a larger dielectric loss angle than said insulative substrate at least in the frequency range of digital signals transmitted by said transmission lines,

wherein each of said insulators is a mixture of glass powder containing a modified ionized additive and a thermosetting organic material containing a hydroxyl radical.

32. (New): A wiring substrate, comprising:

an insulative substrate;

a multiplicity of paired transmission lines formed on said insulative substrate;

terminal chip resistors connected between the terminal ends of the respective paired transmission lines;

insulators each formed to cover a respective terminal resistor and terminal ends of respective paired transmission lines, said insulator having a larger dielectric loss angle than said insulative substrate at least in the frequency range of digital signals transmitted by said transmission lines,

wherein each of said terminal resistors comprises:

a glass substrate containing a modified ionized additive and having a dielectric loss angle which is greater than that of said wiring substrate;

a resistive film formed on one surface of said glass substrate; and

a pair of electrodes formed on the opposite ends of said resistive film.

33. (New): The wiring substrate according to claim 16, wherein each of said predetermined regions of said insulative substrate extends to the terminal sections of respective paired transmission lines.

34. (New): The wiring substrate according to claim 17, wherein each of said predetermined regions of said insulative substrate extends to the terminal sections of respective paired transmission lines.

Amendment under 37 C.F.R. § 1.111
Application No. 10/079,464
Attorney Docket No. 011703

35. (New): The wiring substrate according to claim 18, wherein each of said predetermined regions of said insulative substrate extends to the terminal sections of respective paired transmission lines.